CLAIMS

1. A composition for consumption, said composition comprising a viable lactic acid micro-organism, an enzyme synthesised by said micro-organism and an exopolysaccharide (EPS) product of said enzyme.

2. A composition according to claim 1 wherein the EPS product is formed *in situ* by cultivating the lactic acid micro-organism with a suitable enzyme substrate.

3. A composition according to claim 1 or claim 2 wherein said enzyme is glycosyl transferase enzyme, fructosyl transferase enzyme or glucan sucrase enzyme capable of polymerising sucrose and/or lactose and/or stacchyose, and/or raffinose and/or verbascose

4. A composition according to claim 3 wherein the lactic acid micro-organism belongs to the genus *Lactobacillus*.

5. A composition according to claim 4 wherein said viable lactic acid bacterium is *Lactobacillus sakei spp.*, *Lactobacillus plantarum spp.* or *Lactobacillus salivarium spp.*.

6. A composition according to claim 5 wherein said EPS is obtained following fermentation by *Lactobacillus sakei spp.*, *Lactobacillus plantarum spp.* or *Lactobacillus salivarium spp.* are capable of producing glucan sucrase enzyme.

7. A composition according to claim 6 wherein said EPS is a homo-EPS.

8. A composition according to claim 7 wherein said homo-EPS comprises at least a polysaccharide and/or an oligosaccharide component.

9. A composition according to claim 8 wherein said polysaccharide and/or oligosaccharide component of the EPS comprises glucose.

10. A composition according to claim 3 wherein the lactic acid micro-organism belongs to the genus *Leuconostoc*.

11. A composition according to claim 10 wherein said viable lactic acid micro-organism is *Leuconostoc mesenteroides*.

12. A composition according to claim 11 wherein said EPS is obtained following fermentation by *Leuconostoc mesenteroides* which expresses glycosyl transferase or fructosyl transferase.

13. A composition according to claim 12 wherein the polysaccharide or the oligosaccharide component of the EPS comprises fructan or glucan.

14. A composition according to claim 13 wherein the oligosaccharide is fructo-oligosaccharide or gluco-oligosaccharide.

15. A composition according to any of the preceding claims wherein the amount of produced EPS is capable of being modulated.

16. A composition according to claim 15 wherein said amount of EPS is modulated by the number of viable lactic acid microorganisms, the length of the fermentation process, the incubation temperature, the pH or the acceptor molecule maltose.

17. A composition according to any preceding claim wherein said EPS improves the texture, body, mouth feel, viscosity, structure and/or organoleptic properties of food product containing said EPS as an ingredient.

18. A composition according to any preceding claim wherein the composition is used to ferment milk and produce a yoghurt like ingredient containing structure forming EPS and/or nutritional oligosaccharide.

19. A composition according to any preceding claim wherein the composition acts as prebiotic when used as an ingredient to products for consumption or to pharmaceutical products.

20. A composition according to any of the preceding claims wherein the components of the composition have the capacity to reduce the production of gas by the gastrointestinal microorganisms when used as ingredients to products for consumption or to pharmaceutical products.

21. A composition according to any preceding claim wherein said composition is in a concentrated form.

22. A composition according to any preceding claim wherein said composition is freeze dried, spray dried and/or resuspended.

23. A method of preparing a product for consumption, the method comprising admixing a composition with another component so as to form said product for consumption; wherein said composition is a composition according to any one of claims 1 to 16.

24. A product for consumption obtained by the method of claim 23.

25. A method for preparing a food product, the method comprising admixing a composition with another component so as to form said food product; wherein said composition is a composition according to any one of claims 1 to 16.

26. A food product obtained by the method of claim 25.

27. A product according to claim 24 or claim 26 wherein the composition is added to a dairy product, preferably to yoghurt milk.

28. A product according to claim 27 wherein the composition is added to yoghurt milk before and/or after the fermentation of said milk.

29. The product according to claim 27 or claim 28 wherein the product is a functional food.

30. A method of making a pharmaceutical product, the method comprising admixing a composition with another component to produce said pharmaceutical product wherein said composition is a composition according to any one of claims 1 to 16.

31. A method for preparing a pharmaceutical product according to claim 30 or a pharmaceutical ingredient – the method comprising admixing the composition of the present invention with another component.

32. A pharmaceutical product produced by the method of claim 30 or claim 31.

33. A container comprising a composition, wherein said composition is a composition according to any one of claims 1 to 16.

34. A container comprising a composition, wherein said composition is a composition according to any one of claims 1 to 16, and wherein said container has thereon a label indicating use and/or approval for use to improve the microbial balance of the gastrointestinal tract after consumption of said product.

35. A process for producing an EPS or an enzyme as defined in any preceding claim comprising:

growing a lactic acid bacterium selected from the group comprising *Leuconostoc mesenteroides spp.*, *Lactobacillus sake spp.*, *Lactobacillus plantarum spp.* and

Lactobacillus salivarium spp. which produce an enzyme capable of synthesising an EPS in a commercially acceptable medium, and optionally,
isolating the EPS and/or the enzyme.

36. A process for preparing an EPS as defined in any preceding claim comprising:
growing a lactic acid bacterium selected from the group comprising *Leuconostoc mesenteroides spp.*, *Lactobacillus sake spp.*, *Lactobacillus plantarum spp.* and *Lactobacillus salivarium spp.* which produce an enzyme capable of synthesising an EPS in a commercially acceptable medium supplemented with a suitable enzyme substrate such as sucrose, lactose, raffinose, stacchyose or verbascose and the acceptor molecule maltose as the only carbon source, and optionally,
isolating the EPS.

37. Use of an EPS produced by the process of claim 36 for modulating the viscosity of products for consumption.

38. A process for producing a composition comprising growing *in situ* said lactic acid micro-organism in a commercially acceptable medium whereby said lactic acid micro-organism produces an enzyme capable of synthesising an EPS until the numbers of said lactic acid micro-organism in the order of 10^3 to 10^{11} per ml, preferably 10^5 to 10^{10} per ml and more preferably 10^9 to 10^{10} per ml.

39. Use of a composition according to any one of claims 1 to 16 in the manufacture of a food product, wherein said composition improves the texture, body, mouth feel, viscosity, structure and/or organoleptic properties of the food product.

40. An assay for screening a composition for use substantially as described herein, said assay comprising adding a candidate composition to a food product and determining the extent of improvement in the texture, body, mouth-feel, viscosity, structure and/or organoleptic properties of food product; wherein said composition comprises a viable

lactic acid bacterium, an enzyme derivable from said lactic acid bacterium and an EPS produced by said enzyme.

41. Use of a composition as a functional food ingredient substantially as described herein.

42. Use of a composition as a prebiotic and/or probiotic food ingredient substantially as described herein.

43. A composition, a food product, a method, a process, a use, or an assay substantially as described herein.